

EXHIBIT 13
DATE 2-12-07
HB 408

Feb. 12, 2007
Clinton Cain
2551 Magenta
Bozeman, Mt.
59718

Mr. Chairman & Committee Members
Re: HB408 Tire Burning

We make tires. We ALL came here, there and everywhere on tires. We must recycle our used tires.

Holcim Cement Plant will burn these tires in such a hot kiln blended with water which homogenizes emissions extracted to the air. 43 cement kilns are permitted to burn tires in the United States.

When most people think of burning tires they picture the black pile smoking black smoke emanating into the air and mixing with the exhaust fumes from our cars.

A plant such as Holcim ^{SLC} proposing such a modification of fuels must demonstrate to the DEQ that the emissions would not pollute the air.

Our landfills are over flowing with tires which take centuries to deteriorate and is a large problem.

Some States have plants with tire shredders that produce crumb rubber that is recycled in highways. But not Montana!

Holcim ^{SL} will profit to an extent by using our waste as fuel, while on the same note, so will we.

We should count on our Department of Environmental Quality to protect our air. They ~~should~~ ^{already} monitor the generation coming from the stack.

I urge that Holcim be permitted to try this burning.

Thank You,

Clinton Cain

This EIS has been prepared to comply with MEPA and with DEQ's determination that an EIS is needed.

1.4 Existing Operations

Holcim operates a "wet process" kiln, in which the raw kiln feed material is blended with water to promote homogenization. The mixture is fed into the kiln as slurry rather than as dry ingredients. The kiln is fired by injection of fuel at the lower end to maintain a combustion zone with very high temperatures. Currently Holcim uses a combination of coal, natural gas, syncoal (defined as a process consisting of thermal treatment coupled with physical cleaning to upgrade high moisture low rank coal) and petroleum coke as fuel (Holcim, 2004). See Section 2.2 for a description of the cement-making process.

1.5 Proposed Changes to Use Tires as Fuel

Holcim is proposing to combust tires as fuel in the Trident kiln. The proposal would substitute whole tires for up to 15 percent of the total heat input, on a British thermal unit (Btu) basis. The proposed physical changes include the development of an on-site tire storage area and modification of the kiln to allow for the insertion of tires.

Tires would be delivered and stored in trailers in the quarry prior to delivery to the kiln. A maximum of 15,000 tires would be stored on site at any given time. The tires would be unloaded from the trailers onto a conveyor automatically with a trailer lift. The conveyor would feed the tires to a mechanism that would insert one tire at a time into the kiln at specified time intervals. A gate would be installed into the kiln shell that would allow tires to be dropped into the calcining zone of the kiln. Holcim has projected that 1,137,539 tires could be combusted each year. This equates to a maximum estimate of 94,795 tires, or 950 tons, each month. Holcim has estimated the cost of facility improvements to combust tires as fuel at \$1,000,000 (Holcim, 2004).

1.6 Purpose and Benefits

Holcim stated that the primary purpose in seeking approval for the mid-kiln combustion of whole tires is to realize lower operating costs and to increase operational flexibility (Holcim, 2004). The current annual average fuel cost at the Trident facility for burning coal, natural gas, and coke is \$1,450,000 (Ralph Denoski, personal communication). Incineration of up to 1,137,539 tires per year as a supplemental fuel would result in an annual cost savings of up to \$250,000 or 17 percent of the total fuel costs for the facility. Holcim would have the operational flexibility to use different fuels or combinations of fuel at its discretion or based on fuel availability and costs.

Holcim stated that the combustion of tires would allow it to reduce production costs to a level comparable to other facilities, maintain its existing share of the portland cement market, and create a use for a waste material (Bison, 2000).

Several recent studies evaluated the use of tires as a fuel alternative or to supplement other fuels (UC Davis, 1996; EQC, 1998). The Montana Environmental Quality Council (EQC) study cites statistics from the Scrap Tire Management Council (STMC) that indicate the most significant growth market for tires has been as fuel for incineration. In 1996, approximately 152 million of

the estimated 266 million tires generated in the U.S. were incinerated as supplemental fuel at 107 facilities. These facilities included 36 cement kilns, 23 pulp and paper facilities, 15 electric utilities, and 33 other industrial and electric generating facilities.

Tires have been used as fuel since the 1970s in North America, Europe, and Japan, according to the California Integrated Waste Management Board (CIWMB, 1992: 24-27). Tires have several properties that make them attractive for potential energy usage. They contain 12,000 to 16,000 Btu/pound, depending upon composition and whether or not steel has been removed (CIWMB, 1992: 11-12). An 18-pound tire contains the energy equivalent of approximately 2 gallons of gasoline. In comparison, bituminous coal has a slightly lower heat and energy value, ranging from 11,000 to 13,000 Btu/pound. Tires also have lower moisture content than coal.

Cement kilns burned nearly 30 percent of the total number of tires used for fuel in 1996 (STMC, 1996; STMC, 1997). An Environmental Protection Agency (EPA) report (EPA, 1991) concluded that cement kilns appear to be particularly suitable for the incineration of tires for several reasons. The combustion at high temperatures and long fuel retention times may minimize the need and expense for additional air emission controls other than control for particulates. Kilns require large quantities of fuel, and are capable of being easily modified to include tires in the fuel stream. Cement kiln facilities near Montana that burn tires as supplemental fuel include the Ash Grove Cement kilns in Inkom, Idaho; Durkee, Oregon; Leamington, Utah; and Seattle, Washington. Ten Holcim facilities nationwide are using tires as fuel, including facilities at: Devil's Slide, Utah; Seattle; and Portland, Oregon. Presently, forty-three cement kilns are permitted to burn tires in the United States. No permit application for this use has been denied.

Other reasons and advantages that have been cited for using tires as fuel in cement kilns include:

- Burning whole tires can be attractive economically by reducing fuel costs. Many existing systems can accommodate tire fuel without significant facility modifications. Costs associated with the modifications to burn whole tires in cement kilns are minor in most cases. The cost of tires as fuel can be 70 to 90 percent less than the cost of the primary fuel, depending on geographical location (EPA, 1993). EPA reports cost savings to several cement manufacturers from using tires as a fuel supplement. In one case, tire costs were 34 percent of the cement manufacturer's coal cost on a dollar per Btu basis.
- Cement kiln processes operate at high temperatures and with long residence times and kiln turbulence — conditions that usually minimize the production of metal or other toxic residues. The objective when burning tires in cement kilns is to achieve nearly complete combustion of all organic materials in the fuel so that the complex organic compounds do not become part of the air emissions.
- Non-combustible tire components (e.g., metals) become part of the cement clinker and reportedly do not contribute to air emissions or to waste ash (CIWMB, 1992:24-27).
- Nitrogen oxide (NO_x) emissions usually decrease when tires are burned (CIWMB, 1992:24-27).
- Tires are used in place of coal because they have higher energy by weight (California EPA, 2002).
- Kilns can in some cases charge a disposal fee that is lower than the fee at landfills.
- The steel belts in the tires offer a source of iron needed in the cement making process (California EPA, 2002).